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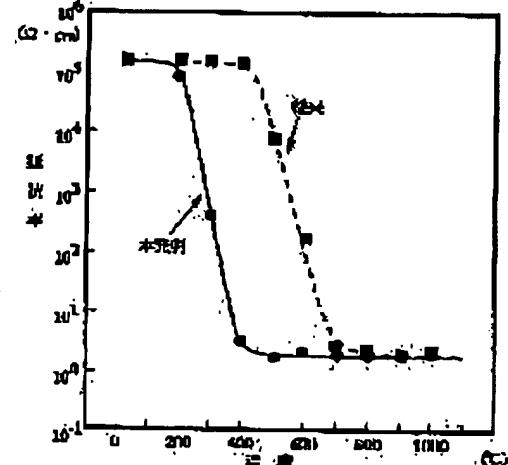
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(54) METHOD OF LOWERING RESISTANCE OF SEMICONDUCTOR NITRIDE

(57)Abstract:

PROBLEM TO BE SOLVED: To provide a new technology which is more advanced compared to the prior technologies, capable of lowering a resistance of semiconductor nitride doped by a p-type impurity.

SOLUTION: This method of lowering the resistance comprises a first process for growing a semiconductor nitride doped by a p-type impurity and then irradiating with electromagnetic waves including an energy of not less than the bandgap energy of the semiconductor nitride, and a second process for providing a heat treatment to the semiconductor nitride in an atmosphere substantially containing no activated hydrogen. By dissolving hydrogen bonding p-type impurity dissociated by providing electrons to the semiconductor nitride with electromagnetic wave irradiation, the resistance of the semiconductor nitride is lowered.



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